CLAIMS:

1. An integrated circuit device comprising:

- an input connection for connecting an external signal conductor;
- a timer circuit comprising a capacitance and a current supplying circuit coupled to an integration node;
- a discharge diode coupled between the input connection and the integration node, with a polarity such that the discharge diode, when in forward bias, is capable of draining current from the current supplying circuit; and
- a detector coupled to the integration node for generating a signal to be supplied to the integrated circuit device to respond to a signal transition on the conductor when a voltage of the integration node passes a threshold value due to integration of a current supplied by the current supplying circuit when the discharge diode is in reverse bias.

2. An integrated circuit device according to claim 1, comprising:

- a further timer circuit comprising a further capacitance and a further current supplying circuit coupled to a further integration node for charging the further integration node in a direction opposite to the direction of charging of the integration node by the current supplying circuit;
- a further discharge diode coupled between the input connection and the further integration node, with a polarity such that the further discharge diode, when in forward bias, is capable of draining current from the further current supplying circuit;
- a further detector with an input coupled to the further integration node; and
- a state holding circuit, coupled to the detector and the further detector, so that the state holding circuit is set to a first and a second state by the detector and the further detector, respectively, in response to signal transitions on the conductor, when a voltage of the integration node and the further integration node pass a threshold value and a further threshold value due to integration of a current supplied by the current supplying circuit or the further current supplying circuit when the discharge diode or the further discharge diode respectively is in reverse bias.

3. An integrated circuit device according to claim 2, comprising a switchable current source having a current output coupled to the input connection for forward biasing the diode, the switchable current source having a switching control input coupled to the state holding circuit for switching off the switchable current source when the state holding circuit is set to the first state and switching it on when the state holding circuit is set to the second state.

4. An integrated circuit device according to claim 2, wherein the detector and the further detector have mutually offset threshold levels, so that no update of the state holding circuit occurs when a difference between voltages at the charging node and the further charging node is less than a sum of forward biased diode voltages of the discharge diodes seen between the charging node and the further charging node.

5. An integrated circuit device according to claim 1, wherein an output of the detector is coupled to a wake-up input of a data processing circuit in the integrated circuit device.

6. An integrated circuit device according to claim 2, wherein a state signaling output of the state holding circuit is coupled to a wake-up input of a data processing circuit in the integrated circuit device.

7. Electronic control system of a car, comprising a signal conductor between substantially different locations in the car, and an integrated circuit device according to claim 1 with its input connection coupled to the signal conductor.